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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------|------------------|
| 10/070,651   | 08/19/2002  | Ing Carl Kramer      | SCHWP0158US          | 9221             |
| 7590 04/06/2005  |             |                      | EXAMINER             |                  |
| Don W Bulson<br>Renner Otto Boisselle & Sklar<br>1621 Euclid Avenue<br>19th Floor<br>Cleveland, OH 44115 |             |                      | MORILLO, JANEL COMBS |                  |
|  |             |                      | ART UNIT             | PAPER NUMBER     |
|  |             |                      | 1742                 |                  |
| DATE MAILED: 04/06/2005  |             |                      |                      |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/070,651

Applicant(s)

KRAMER, ING CARL

Examiner

Janelle Combs-Morillo

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 17-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17-22, 25, 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biswas et al (US 5,802,905) in view of Visser et al (US 5,027,634).

Biswas teaches a device for treating metal extrusion billets (abstract) by a first heating device comprising a furnace heated by gas or electricity, a storage device to keep billets at a temperature equal to or slightly higher than the extrusion temperature, a cooling device (column 2 lines 32-38) with jets operable individually or in groups at different pressures and operating times (column 2 line 38, column 3 lines 37-42), and a transporting means to move the billets from the furnace to the cooling device (column 4 lines 26-28). Biswas teaches "relative movement of the metal block towards the cooling zones takes place at a controllable speed, and the intensity of cooling can be adjusted for each zone by adjusting the amount and/or pressure and/or temperature of the coolant" (column 2 lines 17-20).

Biswas does not teach said cooling device is configured in a horizontal orientation. However, Visser teaches that a metal extrusion billet (#16) can be horizontally cooled (Fig. 5, etc.) by a plurality of spray rings (#36) in order to create a temperature gradient which enables uniform properties along the length of the product with minimum defects such as tearing or hot shorting (abstract). It would have been obvious to one of ordinary skill in the art to combine a

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cooling device operable in a horizontal orientation, as taught by Visser, with the device for treating metal extrusion billets taught by Biswas, because Visser teaches that a metal extrusion billet (#16) can be horizontally cooled (Fig. 5, etc.) by a plurality of spray rings (#36) in order to create a temperature gradient which enables uniform properties along the length of the product with minimum defects such as tearing or hot shorting (abstract).

Concerning claims 18-22, 25, 29-30, as stated above, Biswas teaches cooling device comprising nozzles, operable for different times, temperatures, and pressures.

3. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biswas and Visser in view of EP 696707 (EP'707). Biswas and Visser are discussed in paragraph 2 above.

Biswas does not mention said heating device uses gas burner flames.

However, EP'707 teaches that a gas regenerative burner flame means is a useful for heating furnaces to high temperatures (column 2 lines 15-16) in an efficient manner (column 2 lines 41-42) and with minimal heat loss (column 7 line 9). It would have been obvious to one of ordinary skill in the art to use a gas regenerative burner flame means, substantially as taught by EP'707, for the initial heating means of the extrusion billet taught by Biswas, because EP'707 teaches that said means is useful for heating to high temperatures with minimal heat loss.

4. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biswas and Visser in view of Bessey et al (US 4,825,677). Biswas and Visser are discussed in paragraph 2 above.

Neither Biswas nor Visser teach a block holder/clamping means for said extrusion billet. However, Bessey teaches clamping can be used to transfer members from heating to cooling devices (column 4 lines 22-25, column 11 lines 30-43). It would have been obvious to one of

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ordinary skill in the art to use a clamping means, substantially as presently claimed, in the device for pretreating extrusion billets taught by Biswas and EP'707, because Bessey teaches said clamping can be used to transfer members from heating to cooling devices (column 4 lines 22-25, column 11 lines 30-43).

### ***Response to Amendment/Arguments***

5. In the response filed on January 4, 2005, applicant canceled claims 7-16 and added new claims 17-30. Applicant's argument that the present invention is allowable over the prior art of record because Biswas does not teach said cooling device is configured in a horizontal orientation, has not been found persuasive. It is known in the art of heat treating metal alloy extrusion billets to configure the cooling device in a horizontal manner. Said horizontal cooling device is taught by Visser, and is combined with Biswas for the motivation listed above.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ROY KING   
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

JCM   
April 4, 2005